General notes are used "to provide, in one section of the plans, the various supplemental data required by the specifications." (PS&E Preparation Manual) They are used for clarifications and added information in conjunction with specifications and special provisions. Article 5.4, "Coordination of the Plans, Specifications, and Special Provisions" addresses the hierarchy of the specifications, plans, and general notes in the case of conflict. The specifications allow for changes to requirements through the phrase "unless otherwise shown on the plans." Use special provisions to change requirements in the Standard and Special Specifications.

The following is a listing of example general notes that may be used in conjunction with the 2004 Standard Specifications and a limited number of statewide special provisions. The listing contains 'examples' and further modification, to include project specific details, may be necessary. This listing contains only a few of the general notes that may be used. The specifications allow and may require additional general notes to fully describe the work.

# **Statewide Examples**

#### General

**Project Description** – This project consists of performing *xxxxx* in/on/at *location* in *county(ies)*.

**TxDOT Project Supervisor** – The project will be managed by *Supervisor*, *address*, *phone*, *fax*.

**Contract Prosecution** - Each contract awarded by the Department stands on its own and as such, is separate from other contracts. A contractor awarded multiple contracts, must be capable and sufficiently staffed to concurrently process any or all contracts at the same time.

#### Item 2 Instructions to Bidders

For Plan Sheet Information

This project **includes** plan sheets that are not part of the bid proposal.

*Or:* This project **does not include** separate plans; all requirements are as shown in the bid proposal

View plans on-line or download from the web at:

http://www.dot.state.tx.us/business/plansonline/plansonline.htm .

Order plans from any of the plan reproduction companies shown on the web at:

http://www.dot.state.tx.us/gsd/plans/companies.htm

For A-	+B Projects (With Special Provision)
	Proposals with a bid of more than working days for the substantial completion of
	Milestone 1 will be considered non-responsive.
	Proposals with a bid of more than working days for the substantial completion of
	Milestone 2 will be considered non-responsive.
	Proposals with a bid of more than working days for the substantial completion of
	the project will be considered non-responsive.

### **Item 3 Award and Execution of Contract**

For Multiple Work Order Contracts

This Contract includes work required under multiple work orders. Time requirements for each work order will be...

### **Item 3 Award and Execution of Contract**

For Non-Site Specific Contracts

This Contract includes non-site specific work. Multiple work orders will be used to procure work of the type identified in the contract at locations that have not yet been determined. Time requirements for the non-site specific work orders will be...

#### Item 3 Award and Execution of Contract

For Callout Work

This Contract includes callout work for Item(s)...

#### **Item 3 Award and Execution of Contract**

For Contracts with Multiple Work Orders and Non-Site-Specific Contracts to Address "Effective Period of the Contract"

Work orders may be issued until August 30, 200X. No work orders will be issued after this date unless there is mutual agreement between the contractor and the department. The contract will be in effect until the work on the last work order is completed.

# **Item 3 Award and Execution of Contract**

For establishing the ending date for single work order contracts for callout or cyclic work. This note is used for annual contracts like picnic areas, rest areas, etc. and should not to be used on multiple work order or non-site-specific contracts.

This contract will end on *August 30, 200X*. No further work will be performed after this date, unless there is mutual agreement between the contractor and the department."

#### Item 3 Award and Execution of Contract

For Specifying Production Rates that will be used for determining the allowable time for completing work orders on multiple work order or non-site-specific contracts

The time allowed for each work order will be based on a production rate of *xxx units* per day.

#### **Item 5 Control of the Work**

For Changing the Responsibilities for Surveying (Default is Method A)

The responsibility for the construction surveying on this contract will be in accordance with Article 5.6.B, "Method B" (5.6.C Method C).

#### **Item 5 Control of the Work**

For Projects with Earthwork and Cross-sections

Prior to contract letting, bidders may obtain a free computer diskette or a computerized transfer of files (from the Engineer's office) that contains the earthwork information. If copies of the actual cross-sections in additional to, or instead of, the diskette are requested, they will be available at the Engineers office for borrowing by copying companies for the purpose of making copies for the bidder at the bidders expense.

### **Item 6 Control of Materials**

For handling materials

Contact the project supervisor to request material a minimum of one work day prior to pick up. Load material with contract personnel. Store material in a safe location off TxDOT property or Right of Way unless otherwise approved. Use material furnished by TxDOT only on the TxDOT project(s) intended. Return any unused material as soon as possible.

# Item 7 Legal Relations and Responsibilities

For Contracts with USACE Conditional Permits

The contractor shall not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (USACE) permit area that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The permit area includes all waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. The contractor shall be responsible for any and all consultations with the USACE regarding activities, including project specific locations (PSLs), that have not been previously evaluated by the USACE. The Contractor shall provide the department with a copy of all consultation(s) or approval(s) from the USACE prior to initiating activities.

The contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self determination has been made that the PSL is non-jurisdictional or proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. The contractor is solely responsible for documenting any determination(s) that their activities do not affect a USACE permit area. The contractor shall maintain copies of their determination(s) for review by the department or any regulatory agency.

#### Item 7 Legal Relations and Responsibilities

For Contracts with USACE Conditional Permits

The contractor must document and coordinate with the USACE, if required, prior to any excavation hauled from or embankment hauled into a USACE permit area by either (1) or (2) below.

(1) Restricted Use of Materials for the Previously Evaluated Permit Areas. The Contractor will document both the project specific location (PSL) and their authorization. The contractor will maintain copies for review by the department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:

- a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in Item 110 is used for permanent or temporary fill (Item 132, Embankment) within a USACE permit area;
- b. Suitable embankment (Item 132) from within the USACE permit area is used as fill within a USACE evaluated area; and,
- c. Unsuitable excavation or excess excavation ["Waste"] (Item 110) that is disposed of at a location approved by the Engineer within a USACE evaluated area.
- (2) Contractor Materials from Areas Other than Previously Evaluated Areas. The Contractor will provide the department with a copy of all USACE coordination or approval(s) prior to initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:
  - a. Item 132, Embankment, used for temporary or permanent fill within a USACE permit area; and,
  - b. Unsuitable excavation or excess excavation ["Waste"] (Item 110, Excavation) that is disposed of outside a USACE evaluated area.

# Item 7 Legal Relations and Responsibilities

To Address CGP Thresholds

The total area disturbed for this project is \_\_\_\_ acres. The disturbed area in this project, all project locations in the Contract, and the Contractor project specific locations (PSLs), within 1 mile of the project limits, for the Contract will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the ROW to the Engineer and to the local government that operates a separate storm sewer system.

# **Item 8 Prosecution and Progress**

Changes how the contract time will be charged. (Default is Standard Workweek.)

Working days will be computed and charged in accordance with Article 8.3.A(.1 Five-Day Workweek, .2 Six-Day Workweek, .3 Seven-Day Workweek, or .5 Calendar Day).

#### **Item 8 Prosecution and Progress**

For Allowing Work at Night

Pavement work is allowed to be performed during the nighttime.

# **Item 8 Prosecution and Progress**

For Requiring Work at Night

Work that interferes with traffic is required to be performed during off-peak hours, 7 pm until 6 am.

Or

Perform work at night, with traffic control set up no earlier than 9:00 P.M. and all work

	completed and traffic control removed by <b>6:00 A.M.</b> , when work is required on the following highways:							
ionowing ing	Highway	From	То					
	xxxx	XXXXX	XXXXXXX					
Equipment an	d material may be	pre-staged at approved	locations.					
Item 8 Prosecution a	nd Progress							
(With Special Provision Substantially	on) complete the project	Damages for Substantia  ct in working d  mages is \$ per day	al Completions of the Project ays.					
Item 8 Prosecution a	nd Progress							
The road-user	cost liquidated dan	or Milestones within the mages for Milestone 1 mages for Milestone 2						
Substantially Substantially	complete Milestone complete Milestone	e 1 in working e 2 in working	days. days.					
The time char The time char	ges for Milestone 1 ges for Milestone 1	will begin upon will end upon	· 					
The time char The time char	ges for Milestone 2	2 will begin upon 2 will end upon						
Item 8 Prosecution a	nd Progress							
The number of		final acceptance will b	With Special Provision) eworking days after the					
Item 160 Topsoil								
For Salvaging Topsoi Salvage appro salvage depth	oximately cubic	yards of topsoil from a	areas shown on plans. Maximum					
0	Depth of Topsoil to layer of Topsoil to	be Placed (Or Shown of designated areas.	on the Typical Section)					
Item 161 Compost								
			om areas shown on plans.					

	ing the Depth of Placement for Erosion Control Compost (Default is 2 in.) ce Erosion Control Compost to a depth of in.
Item 162 S	odding for Erosion Control
	shing the Type of Sod to be Placed nish and place (Bermudagrass, etc) sod.
Item 166 F	ertilizer
	ing Fertilizer at the Standard Rate tilize all areas of project to be seeded or sodded.
	ing Fertilizer at a Rate Other Than the Standard Rate rnish and apply fertilizer with analysis of 16-20-0 at a rate of 625 bulk pounds per e.
Item 168 V	egetative Watering
_	ter all areas of project to be seeded or sodded at a rate of
Item 301 A	sphalt Antistripping Agent
	ing a Specific Method or Methods for Addition of Hydrated Lime or Lime Slurry (Pick e) (Specifications allow for any of those below or other specified by the plans.)
	e only method(s) allowed for mixing lime for Item 34X, "Asphalt" is(are);
1)	Mix hydrated lime in an approved pug mill mixer with damp aggregate containing water at least 2% above saturated surface dry conditions.
2)	Add hydrated lime into the drum-mix plant immediately before asphalt binder addition or in the pug mill of the weigh-batch plant before asphalt binder addition. If a weigh-batch plant is used, dry mix aggregates and hydrated lime before adding asphalt binder.
3)	Mix lime slurry in a suitable pug mill mixer with the aggregate.
4)	During mixture production, mix lime slurry with aggregate between the plant cold feeds and the dryer or mixing drum.
Item 310 P	rime Coat
	shing the Rate for the Blotter blotter at the rate of 1 cubic yard per square yard. (Optional)
Item 314 E	mulsified Asphalt Treatment
	shing the Mixture Percentages e% of total volume, emulsified asphalt in the mixture.

# Item 315 Fog Seal

	hing Mixture Percentages% of total volume, emulsified asphalt in the mixture.
Item 316 Su	rrface Treatments
	ng Transverse Variance Rate (Optional) nsverse variance rate of is required.
rollers) (Opi	g the Use of Light or Medium Pneumatic Rollers (Default is for light pneumatic tional) nish light or medium pneumatic-tire rollers in accordance with Item 210, "Rolling."
	cted Asphalt Season (Optional) halt season starts and ends
	ng the Contractor to Remove Vegetation (Optional) nove vegetation and blade pavement edges.
Item 318 Ho	ot Asphalt – Rubber Surface Treatments
Same as Iten	n 316
Item 340 De	ense Graded Hot Mix Asphalt (Method)
Use of _ (A, I defa amo	ing or Requiring the Use of Department Owned RAP (Optional) of Department owned RAP generated on the project (OR located at the intersection
Use more the i	ing the Use of Contractor Owned RAP (Optional) of Contractor owned RAP is allowed for the Type (A, B, C, D, and F) mix at no e than %. (The last part is not needed when defaulting to the specifications for naximum amount of RAP allowed. The maximum amount by specification for Type A B is 30% and for Type C, D, and F is 20% when RAP is allowed by general notes)
RAI	Requirements for Contractor Owned RAP (Optional) P aggregate must meet the requirements of (e.g. Table 1). Perform tests and ride test results to the Engineer.
For OR For Whe	the Type (A, B, C, D, and F) Hamburg Wheel requirement, Tex-242-F, is waived.  the Type (A, B, C, D, and F) material, the requirement for Tex-242-F, Hamburg etcl, is minimum number of passes (lower than requirements of Table 6) at 0.5 rut depth. (Optional)

For Ordinary Compaction (Optional)

For the Type (A, B, C, D, and F) material, ordinary compaction control will be used instead of air void control.

#### Item 341 Dense Graded Hot Mix Asphalt (QC/QA)

When Using RAP (Refer to the previous Item 340) (Optional) For Changing Hamburg Requirements (Refer to the previous Item 340) (Optional)

### **Item 344 Performance-Designed Mixtures**

Use of RAP	' (Refer t	o the	previous	Item	340	except	that	specific	ations	will	allow	ир	to	20%	тах
for all mixe	s.) (Opti	onal)	)												

For Specifying the Ndes

Design the mixture at number of gyrations Ndes = \_\_\_\_\_.

For Addressing Restricted Zone Requirements (Optional)

The aggregate gradation may not pass \_\_\_\_\_ (above, below, or through) the reference zone shown in Table 7.

Design a mixture with a gradation that has stone-on-stone contact and passes below the reference zone shown in Table 7. (Optional)

For Changing Hamburg Wheel Requirements (Refer to the previous Item 340) (Optional)

### **Item 346 Stone Matrix Asphalt**

*Use of RAP (Refer to the previous Item 344) (Optional)* 

For Changing Hamburg Wheel Requirements (Refer to the previous Item 340) (Optional)

# **Item 354 Planing and Texturing Pavement**

For Addressing Ownership (Default is for TxDOT to Own) (Optional)
Retain ownership of planed materials.

For Stockpile Location

Stockpile salvaged materials at (location's address).

### **Item 351 Flexible Pavement Structure Repair**

When required, furnish *Type A* material for sub-grade in accordance with Item 132, "Embankment" as approved.

Furnish *Type D, Grade 3* base, cement stabilized in accordance with Item 247, "Flexible Base".

Furnish *MC-30 or AE-P* prime coat in accordance with Item 300, "Asphalts, Oils and Emulsions" and Item 310, "Prime Coat" as approved and apply at *0.15 gals/SY* residual asphalt.

For the Surface Treatment, furnish *CRS-2P* asphalt in accordance with Item 300, "Asphalts, Oils and Emulsions," and apply at *0.45 gal/SY*. Also supply Type *A*, *Grade 4 or 4s* aggregate in accordance with Item 302, "Aggregates for Surface Treatments."

Furnish *PG 70 - 22 binder*, "*Type D*" asphalt concrete in accordance with Item 340, "Dense-Graded Hot-Mix Asphalt (Method)."

Use of a motor grader will not be permitted for asphalt concrete pavement.

Haul and stockpile salvaged material at .....

#### Item 356 Fabric Underseal

For Specifying the Fabric Roll Widths Needed The following roll widths are required: Width Length (ft)(Length if multiple widths are needed) For Requiring the Contractor to Remove Vegetation (Optional) Remove vegetation and blade pavement edges. For Requiring Removal of RPMs (Optional) Remove existing raised pavement markers. **Item 358 Asphalt Concrete Surface Rehabilitation** For Requiring a Height Adjustment on the Scarifier (Optional) Furnish a scarifier with height adjustments to clear manholes or other obstructions. For Requiring an Onboard Pug mill (Optional) Provide an onboard pug mill. For Requiring a Mobile testing Laboratory (Optional) Furnish a mobile testing laboratory meeting requirements of Tx-237-F and a Level 1A certified laboratory technician who is qualified under the Department's approved program. For Requiring the Mix to Meet Certain Requirements (Required) Design the mixture to restore the in-place asphalt concrete pavement to meet Item 34X Type and binder properties of (e.g. PG XX-XX). **Item 361 Full Depth Repair of Concrete Pavement** For Requiring Timely Placement Schedule work so that concrete placement follows full-depth saw cutting by no more than

#### Item 405 Foundation Test Load

days (hours).

For Requiring the Contractor to Furnish Certain Equipment (Default is for the Department to furnish this) (Optional)

Provide jacking equipment, beams, and displacement indicators.

### **Item 407 Steel Piling**

For Changing the Paint System (The System III or IV Inorganic zinc primer is the default) (Optional)

Paint steel piling with the following system:

#### **Item 416 Drilled Shaft Foundations**

For Disallowing the Slurry Displacement Method (Default is to allow it.) (Optional)

Do not use the Slurry Displacement Method

#### **Item 420 Concrete Structures**

For Mass Concrete Measurement Method (Must Choose) (Required)
Mass Concrete will be (measured in place/a plans quantity item).

To Disallow the Use of Membrane Curing (Optional)

Do not use membrane curing for e.g. structural elements.

To Allow for In-Water Placements (Default does not allow unless approved) (Optional) In-water placements are allowed for \_\_\_\_\_\_.

For the Department to Perform Schedule Restriction Testing (Default is for Contractor to perform this testing) (Optional)

The Engineer will perform all testing for schedule restrictions.

To Change the Plans Quantity Elements (See table 2 for default list] (Optional)
The following elements are Plans Quantity elements:

### **Item 421 Hydraulic Cement Concrete**

For Specifying the Severe Exposure Elements (Moderate exposure is the default.) (Optional) Provide air entraining for severe exposure for the following elements.

For Removing the Requirement for Air Entrainment (List, Class B is the only excluded class in the spec, Item 424 addresses air entraining for prestressed concrete] (Optional)

Air entraining is not required in the following classes of concrete:

For Requiring Sulfate Resistant Concrete (Required for high sulfate areas.)

Provide sulfate-resistant concrete for the following classes of concrete (OR elements):

[list]

For Department Furnished Testing Equipment (For all concrete including Item 360) (Default is for Contractor to provide all testing equipment) (Optional)

The Engineer will provide compressive strength testing (Other equipment such as molds, slump cones, test molds, maturity meters, wheelbarrow, curing facilities can be specified as well.) equipment for acceptance testing.

For Department handling of Test Specimens (Default is for the Contractor to handle) (Optional)

The Department will (provide, strip, cure, and handle and transport) (Pick any or all) test specimens for testing.

For Specifying the Use of Flexural Testing (Default is compressive testing) (Optional)

Flexural strength testing will be performed on hardened concrete for the following classes of concrete (OR all concrete.): [list classes of concrete and 7-day or 28-day strength flexural requirements, default is for compression testing]

Limit cementitious material content to xxx lb/cy for the following classes of concrete: [700 lb (approx 7.5 sacks) is max in spec]

For Allowing the Use of Type III Cement (Default is for precast elements only.) (Optional)

Type III cement may be used for the following elements: [list]

### **Item 423 Retaining Wall**

To Specify Approved MSE Walls (Required)

For MSE walls, provide a system from one of the following approved suppliers:

Reinforced Earth Walls The Reinforced earth Company 1331 Airport Freeway, Suite 302 Euless, TX 76040-4150 (817) 283-5503

Retained Earth Walls Foster Geotechnical 901 North Highway 77 Hillsboro, TX 76645 (254) 580-9100

Reinforced Soil Embankment Walls Texas Welded Wire, Inc. 645 W. Hurst Blvd. Hurst, TX 76053 (817) 282-4560

Strengthened Earth Walls Hanson Concrete Products 3500 Maple Ave. Dallas, TX 75219 (214) 525-5877

Tricon Retained Soil Walls Tricon Precast Inc. 15055 Henry Rd. Houston, TX 77060 (713) 931-9832

Tensar Retaining Wall System Tensar Earth Technologies, Inc.

5775-B Glenridge Dr. Atlanta, GA 30328 (404) 250-1290

Strengthened Soil Walls Shaw Technologies Inc. P.O. Box 271448 Flower Mound, TX 75027 (972) 490-1924

VP Wall System Valley Prestress Products, Inc. P.O. Box 1367 Mission, TX 78573 (956) 584-5701

To Specify the Surface Finish Required (Required)

Provide the following surface finish for walls: [list]

To Specify Alternative Backfill Requirements (Type B is default) (Optional)

Use Type \_ backfill for permanent MSE walls.

To Specify the Type of Concrete Block Wall (Required)

For Concrete Block walls, provide a system from one of the following approved suppliers:

Keystone Retaining Walls Jewell Concrete Products, Inc. P.O. Box 7115 Waco, Tx 78716 (800) 792-3216

Anchor Wall System Pavestone Company P.O. Box 1868 Grapevine, Texas 76051 (817) 481-5802

Versa-Loc Retaining Walls Palestine Concrete 2202 Chockhill Rd Dallas, Texas 75212 (972) 263-5077

Amastone Earth Retention Systems Blocks And Walls, Inc. P.O. Box 1157 Del Valle, Texas 78617 (512) 389-0270

Pyramid Blockwalls

The Reinforced Earth Company 1331 Airport Freeway, Suite 302 Euless, Texas 76040-4150 (817) 283-5503

Stonewall Retaining Walls Featherlite Building Products P.O. Box 1029 Austin, Texas 78767 (512) 472-2424

Mesa Retaining Wall System Tensar Earth Techologies, Inc. 5775-B Glenridge Drive, Suite 450 Atlanta, Georgia 30328 (404) 250-1290

Allan Block Retaining Walls Eagle Concrete Products 6415 Hardy Street Houston, Texas 77022 (800) 933-5509

T-Block Retaining Wall System T&B Structural Systems 637 W. Hurst Blvd. Hurst, Texas 76053 (817) 280-9858

Omega Walls Shaw Technologies, Inc. P.O.Box 654 Colleyville, Texas 76034 (817) 427-0997

Rockwood Retaining Walls Del Norte Masonry Products 4560 Ripley Drive El Paso, Texas 79922 (915) 535-2375

Venture Retaining Walls Venture Retaining Wall Systems 1333 West 120th Ave., Suite 312 Denver, Colorado 80234 (303) 254-8846

# **Item 424 Precast Concrete Structures (Fabrication)**

To Require Shop Drawings (Default does not require shop drawings) (Optional)
Submit shop drawings for the following non-stressed members: [list]

To Require Moderate or Severe Exposure Concrete (Default is for no air entraining in precast concrete built under this) (Optional)

Air-entraining for moderate/severe exposure [pick one] is required for the following elements: [list]

To Require Permeability, etc. Testing (Default is for compression testing only) (Optional)

The following tests will be performed on prestressed concrete elements: [list tests: permeability, ...;]

To Require a Surface Finish Other than the Default (Optional)

Provide the surface finish listed for the following elements: [list]

To Modify the Tolerance Requirements (For tolerances not listed in the spec or to change a tolerance value) (Optional)

Meet the tolerances listed for the following elements: [list]

To Not Require an Inspection Laboratory (Default is for contractor to provide these) (Optional)
An inspection laboratory and laboratory equipment are not required for casting of the following elements:

#### **Item 427 Surface Finishes for Concrete**

To Require or Change the Surface Finish (Optional)

Provide the following surface finish for the listed elements: [list element and finish if different]

#### **Item 428 Concrete Surface Treatment**

For Concrete Surface Treatment (Required)

Provide a Class \_ Surface Treatment to the following elements: [give class and list of elements]

#### **Item 429 Concrete Structure Repair**

To Specify the Type of Repair Material (Some require it to be shown on the plans) (Optional)
Use the following types of repair materials: [list]

### Item 432 Riprap

For Cement Stabilization (Required)

For cement stabilized riprap provide (type and grade) aggregate in accordance with Item
\_\_\_\_\_e.g. Item 247, "Flexible Base"].

To specify Materials (B is default) (Optional)

To specify Materials (II is default) (Optional)

Provide Class Concrete for pneumatically placed concrete.

To specify Materials (natural is default) (Optional)

Provide Class Concrete for riprap./

Stone riprap may be artificial stone.

To specify Materials (Dry stack, ungrouted, is the default) (Optional) Grout is required for stone riprap.

#### **Item 434 Elastomeric Bridge Bearings**

To specify Materials (For bearings with special components, indicate if fabrication is under a different spec). (Optional)

Fabricate bearings (or special components) in conformance with Item XXX.

#### **Item 442 Metal for Structures**

For CVN Requirements (Pick 1 or 2 – see PS&E checklist for criteria) (Required) Use temperature Zone  $\underline{X}$  for CVN testing.

For Requiring Painting or Galvanizing (Default is unpainted) (Optional)

Paint aluminum elements with the following system:

OR

Paint galvanized elements with the following system:

### **Item 446 Cleaning and Painting Steel**

For Specifying a Different Paint (Default is System II with #742 gray appearance coat, use the Federal Standard color designation number instead of a color name) (Optional)

Provide a System Paint with a Federal Standard 595B # color.

For Repainting Projects (The Specification Requires Contractor Disposal) (Optional)

The existing coating to be removed may contain lead or other hazardous materials.

For Containment (Where needed for large trusses) (Optional)
Provide a containment load analysis for wind loads.

#### **Item 454 Bridge Expansion Joints**

Note for Header-Type Expansion Joint (Required)

For Header-Type Expansion Joints, the following systems are approved:

SSI-XJS Richard Waters 4021 Benbrook Highway Fort Worth, Texas 76116 (817) 731-7890

Watson Bowman-Acme Ronald Poleon 102 Enfield Trace Woodstock, Georgia 30189 (770) 592-9021

*Note for Asphalt-Plug Expansion Joints (Required)* 

For Asphalt-Plug Expansion Joints, the following systems are approved:

Expandex Asphalt Plug Watson Bowman-Acme 102 Enfield Trace Woodstock, Ga 30189 Attn: Ronald Poleon 770-592-9021

Matrix 502 Asphalt Plug Pavetech International, Inc. 105 May Drive Harrison, Ohio 45030 Attn: Richard Baker 1-800-544-7737

Thorma-Joint Dwight L. Lee and Associates P.O. Box 1357 Keller, Tx 76244 817-379-0525

Deery American Corp. P.O. Box 4099 Grand Junction, Co 81502 Attn: San Kearl 1-800-227-4059

#### **Item 496 Removing Structures**

### For Disposal of Materials (Requires a Special Provision to Item 6)

The structure(s) to be removed have surface coatings which may contain hazardous materials. Provide for the safety and health of employees and abide by all OSHA Standards and Regulations.

### For Salvaging Materials

Store the following items to be salvaged at a location designated by the Engineer: [list]

### Item 502 Barricades, Signs, and Traffic Handling

### For Subsidiary item (Requires a Special Provision to Item 502)

Traffic control required for this project will not be paid for directly, but will be considered subsidiary to the various bid items.

### For additional TCP information

Provide flagmen properly attired in a white hard hat, approved safety vest and stop/slow paddle. Provide two-way radios in areas where flagmen do not have visual contact with one another or cannot communicate with one another.

Provide shadow vehicles equipped with Truck Mounted Attenuators (TMA) as shown on Traffic Control Plan (TCP) standards (2 series).

Limit lane closures to a maximum of 3 miles. If more than one lane closure location is desired, provide a minimum of a 2 mile passing zone between locations. Provide a separate sign set up for each location.

Ensure equipment and materials are a minimum of 30 feet from the edge of the travel lane during non-working hours.

Erect signs in locations not obstructing the traveling public's view of the normal roadway signing or necessary sight distance at intersections and curves.

# **Item 504 Field Office and Laboratory**

For Requiring a Field Office and Laboratory (Optional)

Provide a Type (A, B, C, and D) (Field Office, Field Office and Laboratory, etc.) in accordance with Item 504 Field Office and Laboratory.

For Requiring Security Fencing (Optional)

Security fencing is required for the *(field office, etc.)* and parking area in accordance with Item 504, "Field Office and Laboratory."

For Removing the Requirement for a Phone (Optional)

A phone will not be required for the (field office, etc.)

For Requiring a Computer, etc. (Separate notes may be used for copier and facsimiles) (Optional)

A (desktop or laptop computer), (integrated printer, copier, scanner, and facsimile unit), (and internet service) in accordance with DMS 10101 is required for this project.

# Item 506 Temporary Erosion, Sedimentation, and Environmental Controls

For Removing the Requirement for Contract to Establish 70% Vegetative Cover Prior to Final Acceptance (Optional)

The Department will take over responsibility for the 70% density vegetative establishment upon the completion of all other work in accordance with the contract and final acceptance.

### Item 520 Weighing and Measuring Equipment

For Requiring a Summary Spreadsheet (Optional)
A summary spreadsheet is required for Item(s) XXX (and XXX).

### **Item 585 Ride Quality for Pavement Surfaces**

For Changing the Pay Adjustment Schedule (Default is Pay Schedule 3) (Optional).
Use pay adjustment schedule (1 or 2) to evaluate ride quality of
(Add specific roadway and location for multiple roadways, e.g. travel
lanes of SH 35) in accordance with Item 585, "Ride Quality for Pavement Surfaces."

For Changing to Surface Test Type B for Service Roads, Ramps, etc. (Default is A) (Optional).

Use Surface Test Type B to evaluate ride quality of the \_\_\_\_\_\_\_(Add specific roadway and location, e.g. service roads and ramps of SH 35) in accordance with Item 585, "Ride Quality for Pavement Surfaces."

For Changing to Surface Test Type A for Travel Lanes (Generally, Default is B for Travel Lanes) (Optional).

Use Surface Test Type A to evaluate ride quality of travel lanes (Add specific roadway and location, e.g. travel lanes of SH 35 from \_\_\_\_\_ to \_\_\_\_) in accordance with Item 585, "Ride Quality for Pavement Surfaces."

# **Item 636 Aluminum Signs**

Salvage and deliver all aluminum sign faces to the local TxDOT maintenance office.

### Item 644 Small Roadside Sign Supports and Assemblies

Salvage and deliver all aluminum sign faces to the local TxDOT maintenance office.

# Item 700 Pothole Repair

Furnish PG 70 - 22 binder, "Type D" asphalt concrete in accordance with Item 340, "Dense-Graded Hot-Mix Asphalt (Method)."

Furnish SS-1H asphalt in accordance with Item 300, "Asphalts, Oils and Emulsions," for tack coat.

#### Item 712 Cleaning and Sealing Joints and Cracks (Asphalt Concrete)

Furnish Class B Rubber-Asphalt Crack Sealing compound in accordance with Section 300.2.H, Asphalt, Oils and Emulsions.

When need to reduce tracking, as directed, furnish fine aggregate in accordance with Section 340.2.A.3., as approved.

Performed crack sealing under existing traffic with minimal interference to the operation of the facility.

Protected raised pavement markers from damage.

Route cracks to the dimension of \( \frac{1}{4} \) inch deep and 1 \( \frac{1}{2} \) inch wide.

Unless otherwise approved, perform crack sealing during the following season: November 15 to March 30. Begin crack sealing early enough to complete the entire project during the crack sealing season.

Complete all crack sealing at each location before beginning operations at subsequent locations, unless otherwise approved.

Working (Calendar) days were determined by using a production rate of 25 lane miles per day.

Clean roadway of all debris and open to traffic as soon as possible, and no later than the end of the day.

Dispose of solvents or other materials in a timely manner in accordance with local, state and federal regulations. Provide written documentation showing proof of compliance when required.

### **Item 720 Repair of Spalling in Concrete Pavement**

Furnish an approved, prepackaged Rapid Set Concrete for all repairs.

Before repair operations commence, when required, provide documentation of the minimum flexural and compressive strength of the concrete tested in accordance with Tex-418 A and Tex-448 A.

Dispose of debris off the right-of-way in accordance with federal, state, and local regulations. Provide written documentation showing proof of compliance when required.

### **Item 730 Roadside Mowing**

Provide adequate equipment meeting all requirements, to average xxxxx acres per day for Strip Mowing and xxxxxx acres per day for full width mowing. The State will inspect the equipment to ensure that all mowers are adjusted properly for the correct mowing height and meet all safety requirements prior to beginning mowing operations and at any time during the contract period.

The Department will issue a written notice to begin a mowing cycle. In this notice, the contractor will be given the number of acres required to be mowed, the number of working days allowed to complete the mowing cycle, and the date when time charges for the mowing cycle will start. The number of working days will be determined by dividing the total number of acres required for the mowing cycle by average rate as shown above. Liquidated damages will be assessed for any working day charged beyond the authorized time. Time will be suspended between mowing cycles.

Provide a slope mower in areas too steep to mow with conventional equipment. Provide equipment capable of mowing the slope while traveling on the pavement. Do not damage existing slope surfaces or injure existing growth.

Non-Mow Areas are marked by delineator posts. Contact the project manager for any questions concerning location.

Using an approved power washer, wash all debris off of mowers and tractors before moving from one county to another.

Repair damage caused by the contractor's operations, to the highway right of way, signs, fences, delineators, plant materials or any other appurtenances, part of or adjacent to the highway facility. The Department has the authority to charge the contractor for any damage not repaired.

Hand trimming shall be cut at approximately 2 in.

#### **Item 734 Litter Removal**

Provide adequate personnel, to average xxxxx acres of litter removal per day.

The Department will issue a written notice to begin a litter cycle. In this notice, the contractor will be given the number of acres required to for litter pickup, the number of working days allowed to complete the cycle, and the date when time charges for the cycle will start. The number of working days will be determined by dividing the total number of acres required for the litter cycle by average rate as shown above. Liquidated damages will be assessed for any working day charged beyond the authorized time. Time will be suspended between cycles.

Once work has started on a cycle, proceed in an expeditious manner satisfactory to the Engineer until all work on that cycle is satisfactorily completed.

Whole tires picked up from the right-of-way may be disposed of at the Maintenance Section Warehouse at a location designated by the Project Supervisor.

The Contractor will not be required to remove dead animals; however, notify the Project Supervisor of the location of any dead animals found.

Measure the volume of litter removed from each tract, as directed, and keep records of the quantities. Provide documentation on the volume of litter removed after each cycle.

#### Item 735 Debris Removal

Whole tires picked up from the right-of-way may be disposed of at the Maintenance Section Warehouse at a location designated by the Project Supervisor.

Notify within 1 hour, owners of any dead animal appearing to be a pet that has some form of collar, tag or other means of identifying the owner. Hold the animal for pickup by the owner, if requested. Provide documentation to the Project Supervisor of any animal picked up by the owner, the owners name, address and phone number.

# **Item 738 Cleaning and Sweeping Highways**

Provide regenerative air vacuum sweepers on the following locations, unless otherwise approved: xxxxxxxxxxxxx

Provide shadow vehicles with truck mounted attenuators behind sweepers at all times.

Follow the schedule of roadways provided by the Engineer, unless otherwise approved.

Night Work. Perform all work from 9:00 pm to 6:00 am. Ensure all sweepers are off the roadways by 6:00 am.

Aggregate placed on roadways as part of a deicing operation, shall be removed as directed by the Engineer and will be paid for under the item "Aggregate Removal."

# Item 740 Graffiti Removal and Anti-Graffiti Coating

The Department will furnish paint to match existing painted surfaces. Request paint, from the project supervisor, a minimum of two working days prior to its planned use.

### **Item 745 Picnic and Rest Area Maintenance**

#### Rest Areas

This contract includes maintenance of the following rest areas:

County	Highway M	ile Marker	Direction	Attendants	Hours
1. xxxxx	IH xxx	XXX	South Bound	1	15
				6:00 AM to 9:0	00 PM
2. xxxxx	IH xxx	XXX	North Bound	1	12
				6:00 AM to 6:0	00 PM

#### 3. etc.

If the Rest Area is staffed less than 24 hours per day as required, provide "Janitorial Maintenance," in accordance with Section 745.3.A, a minimum of three times per day, the first thing in the morning around 7:00 AM, in the afternoon, before 5:00 pm and again the last thing before the attendant leaves for the night.

Provide "Mowing, Edging and Trimming" in accordance with Article 745.3.B.1, once every week unless otherwise approved.

Prune dead and undesirable growth from trees and shrubs, once a year in December or January and as needed or directed.

Remove and dispose of tree clippings, limbs, leaves, and pine needles three times per year as directed by the Project Supervisor.

Fertilize once a year in March, with a slow release polyon coated 20/10/5 Analysis fertilizer at a rate of 100 lbs per acre, unless otherwise approved.

Report any needed repairs or vandalism noticed.

#### Picnic Areas

This contract includes maintenance of the following rest areas:

County	Highway Mile Marker		Direction	Attention	Hours
1. xxxxx	SH xxx xxx		South Bound	1	12
				6:	00 AM to 6:00 PM
2. xxxxx	US xxx	XXX	North Bound		12 00 AM to 6:00 PM
3. etc.				•	

Provide "Janitorial Maintenance," in accordance with Section 745.3.A, a minimum of three times per week, on Mondays, Wednesdays and Fridays. When a working day falls on a national holiday, perform the work on the week day prior to the holiday.

Provide "Mowing, Edging and Trimming" in accordance with Section 745.3.B.1, once every two weeks unless otherwise needed or directed.

Perform all work during daylight hours.

Prune dead and undesirable growth from trees and shrubs, once a year in December or January and as needed or directed.

Remove and dispose of tree clippings, limbs, leaves, and pine needles as directed by the Project Supervisor.

Fertilize once a year in March, with a slow release polyon coated 20/10/5 Analysis fertilizer at a rate of 100 lb. per acre, unless otherwise approved.

Litter barrel liners will be furnished by the Department unless otherwise specified. Furnish all other supplies and equipment necessary.

Report any needed repairs or vandalism noticed.

### **Item 751 Landscape Maintenance**

Landscape Maintenance Schedule. Perform landscape maintenance tasks on the schedule as follows and as approved or directed.

March 1 to September 30- 1 cycle every 14 days.

October 1 to February 28-1 cycle every 30 days

Furnish lawn mowing equipment such as hand pushed mowers or riding lawn mowers that produce a uniform cut, unless otherwise approved. Keep blades sharp.

Use caution during mowing and trimming operations to eliminate flying debris from becoming possible hazards to the public.

Perform all work during day light hours.

Mowing will not be permitted when in the opinion of the Engineer, soil or weather conditions are such that the right-of-way would be damaged.

Fertilize once a year in March, with a slow release polyon coated 20/10/5 Analysis fertilizer at a rate of 100 lbs per acre, unless otherwise approved.

Prune dead and undesirable growth from trees and shrubs, once a year in December or January and as needed or directed.

Remove and dispose of tree clippings, limbs, leaves, and pine needles three times per year as directed by the Project Supervisor.

Remove litter prior to the mowing operations.

Replace dead or diseased plants with the same species and size as was originally present unless otherwise approved.

#### Item 752 Tree and Brush Removal

The Department will mark with flagging the trees and stumps to be removed.

Trim trees and brush within the ROW as shown on Standard Sheet TRB-04(1-2).

Trim trees and brush at intersections as directed by the Engineer to provide for safe sight distance.

Complete all work on a roadway including removal of debris or chipping, before starting on another roadway, unless approved.

Complete tree trimming operations on one side of the roadway before beginning operations on the other side.

Provide the Engineer with written consent by the property owner if fallen trees or debris are left on private property.

Chip tree and brush debris to a maximum size of 1 inch thick and spread out to provide a uniform appearance to a maximum total depth of 4 inches.

Do not deposit wood chips in developed areas or in front of houses. Do not obstruct drainage when spreading chips on the right of way.

Avoid damaging utilities during stump grinding operations by contacting utility companies and locating all underground lines in the vicinity of the work.

The burning of brush will not be permitted on the right of way.

When trimming oak trees, disinfect tools with 70% methyl alcohol, chlorine solution, or other approved disinfectant before moving from one tree to another.

All diseased and/or infected limbs, branches and chips shall be removed from the right of way.

### **Item 760 Cleaning and Reshaping Ditches**

Provide the Engineer with written consent by the property owner if removed material is disposed of on private property.

Complete all work on a roadway before starting on another roadway, unless approved.

Stockpile excavated material at locations as directed. When complete, leave stockpile site in a smooth and uniform condition.

# Item 764 Pump Station and Drainage System Cleaning

Empty and clean vactor truck storage compartments prior to working on this project. Get TxDOT inspection prior to commencing work. A small amount of normal wash in the tank will be permitted.

Remove and replace culvert grates as needed or directed. This work will include bolting and unbolting the grates. Furnish replacement hardware for any missing or damaged nuts, bolts and washers, unless otherwise approved. This work is subsidiary to the various bid items

Have tested, debris or wash water removed that smells of volatiles or shows signs of environmental contamination by an approved laboratory. For material testing positive for contamination, provide written receipts showing disposal at licensed disposal facilities.

### Item 770 Guard Fence Repair

Guard fence repair on this contract may be located on any road in the xxxxx district. Except as necessary for emergencies, the Department will work with the Contractor to establish minimum work order quantities and maximum response times. Generally work orders will be issued when approximately 2 days work has been identified.

The Contractor should anticipate working a minimum of 4-8 working days per month. This work will not likely be consecutive but may be spread out over the entire month.

All materials will be furnished by the Department. Provide a list of materials needed to the Project Supervisor a minimum of 48 hours prior to pick up. After notification by the Department that materials are ready, pick up materials at the maintenance section as directed. Return any unused materials to the same location.

Avoid damaging utilities during guard fence operations by contacting utility companies and locating all underground lines in the vicinity of the work.

Furnish crew(s) and equipment capable of maintaining work in a continuous manner for the completion of the work on schedule, as approved.

Furnish 2 crews with appropriate equipment as directed.

Use care to avoid disturbing pavement surfaces.

Furnish and place topsoil to repair areas disturbed by construction operations, as approved. The topsoil and placement will not be paid for directly, but will be considered subsidiary to the various bid items.

Disposal of waste material from this project may include environmentally regulated material. Provide written receipts showing disposal at licensed disposal facilities. For salvaged material disposed of on private property, ensure the material is not visible from a highway. Acquire and furnish to the Department, copies of written agreements between the contractor and property owner, prior to disposal.

Clear and remove from all work sites, surplus and waste materials and leave the site in a neat and aesthetically pleasing condition.

Furnish domed or beveled end timber posts as needed. Do not mix these posts within a continuous length of rail, unless otherwise approved. Posts that are removed and replaced

will be uniform with the existing posts. Domed posts may be cut on a bevel to match existing posts.

Perform work Monday through Friday during daylight hours unless otherwise approved. Close no more than one lane at a time.

If closing a lane is necessary, closure time shall be Monday through Thursday, 9:00 A.M. to 3:00 P.M. and Friday, 9:00 A.M. to 12:00 P.M. (noon).

Removing and replacing reusable items for the Contractor's convenience will not be paid for directly, but will be considered subsidiary to the various bid items.

### **Item 772 Post and Cable Fence**

Furnish Class "B" Concrete in accordance with Item 421.

Disposal of waste material from this project may include environmentally regulated material. Provide written receipts showing disposal at licensed disposal facilities. For salvaged material disposed of on private property, ensure the material is not visible from a highway. Acquire and furnish to the department, copies of written agreements between the Contractor and property owner, prior to disposal.

Clear and remove from all work sites, surplus and waste materials and leave the site in a neat and aesthetically pleasing condition.

Perform work Monday through Friday during daylight hours unless otherwise approved. Close no more than one lane at a time.

#### **Item 774 Attenuator Repair**

The following types of Attenuators may be repaired in this contract:

GREAT
REACT 350
QUADGUARD
TRACC
Wide TRACC
VIA (Steel Barrels)
HYDRAULIC CRASH CUSHION
VIA (Sand Filled Plastic Barrels)

When replacing a complete unit, furnish REACT 350 attenuators, as approved. If closing a lane is necessary, closure time shall be Monday through Thursday, 9:00 A.M. to 3:00 P.M. and Friday, 9:00 A.M. to 12:00 P.M. (noon).

If concrete is needed, furnish Class "A" Concrete in accordance with Item 421.

# Item 776 Metal Rail Repair

If concrete is needed, furnish Class "C" Concrete in accordance with Item 421.

Replace all rail on bridge with Traffic Rail as shown on TxDOT Standard T501.

The old railing removed on this project shall remain the property of TxDOT. Haul and neatly stack the salvaged rail at the location specified at the xxxxxxxxxx Maintenance Yard.

### **Item 780 Epoxy Injection**

After completion of repair, paint outside and bottom of outside beam with paint furnished by the Department. Request paint from Project Supervisor 2 working days in advance of need.

# Item 784 Steel Bridge Member Repair

Restrain damaged beam by the placing braces against the adjacent beam at the junction of the web and top flange. Apply no more than 500 lb. of force against damaged beam while heating.

Remove damaged section of beam as directed to the center of the existing beam. At the intersection of the horizontal and vertical cuts, provide a minimum of a 3 inch radius. Straighten remaining web as necessary using requirements of Section 784.4.A. Weld in new section of beam in accordance with Item 448, "Structural Field Welding".

Paint entire repaired beam in accordance with Item 446, "Cleaning and Painting Steel" using Protection System II. Match existing color as approved.

Provide replacement diaphragms shop drawings for approval.

#### Item 788 Concrete Beam Repair

Remove damaged concrete to first reinforcing strands without damaging strands. Provide the inspector access to inspect strands.

Provide for approval, a written plan for repairing prestressing tendons prior to beginning work or as soon as possible after discovery of damaged tendons.

Preload the damaged beam prior to epoxy injection and repairing concrete.

Remove damaged bridge protective assembly and do not replace.

Submit a schedule of repair materials for approval. Provide sufficient quantity of repair materials for trial batches of the concrete and crack injection material, as directed.